



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TRANSACTIONS
OF THE
AMERICAN PHILOSOPHICAL SOCIETY,
HELD AT PHILADELPHIA,
FOR PROMOTING USEFUL KNOWLEDGE.

VOL. IX.—NEW SERIES.

PUBLISHED BY THE SOCIETY.

Philadelphia:
WILLIAM S. YOUNG, PRINTER,—NO. 50 NORTH SIXTH STREET.
1846.

C O N T E N T S.

	Page
Laws of the Society relating to the Transactions,	iii
Officers of the Society for the Year 1846,	iv
List of the Members of the Society elected since the Publication of the Eighth Volume,	v
Obituary Notice,	vi
ARTICLE I.	
Continuation of Mr. Lea's Paper on Fresh Water and Land Shells,	1
ARTICLE II.	
Account of a Trigonometrical Survey of Massachusetts, by Simeon Borden, Esq., with a Comparison of its Results with those obtained from Astronomical Observations, by Robert Treat Paine, Esq., communicated by Mr. Borden,	33
ARTICLE III.	
Observations on Egyptian Ethnography, derived from Anatomy, History, and the Monuments. By Samuel George Morton, M.D.,	93
ARTICLE IV.	
On Two Storms which were experienced throughout the United States, in the Month of February, 1842. By Elias Loomis,	161
ARTICLE V.	
On the Conversion of Benzoic into Hippuric Acid. By James C. Booth and Martin H. Boyè,	185
ARTICLE VI.	
Account of the Observatory and Instruments of the United States Military Academy at West Point; with Observations on the Comet of 1843. By William H. C. Bartlett,	191
ARTICLE VII.	
Memoir of the Character and Prospects of the Copper Region of Gibara, and a Sketch of the Geology of the north-east part of the Island of Cuba. By Richard C. Taylor,	204
ARTICLE VIII.	
Notice of Fossil Arborescent Ferns, of the Family Sigillaria, and other Coal Plants, exhibited in the Roof and Floor of a Coal Seam, in Dauphin County, Pennsylvania. By Richard C. Taylor,	219

	Page
ARTICLE IX.	
Description of Some New Fossil Shells from the Tertiary of Petersburg, Virginia. By Henry C. Lea, .	229
ARTICLE X.	
Description of New Fresh Water and Land Shells. By Isaac Lea,	275
ARTICLE XI.	
Observations made in the Years 1838, '39, '40, '41, '42, and '43, to determine the Magnetical Dip and the Intensity of Magnetical Force, in several parts of the United States. By John Locke, M. D., Professor of Chemistry and Pharmacy in the Medical College of Ohio,	283
ARTICLE XII.	
Observations of the Magnetic Dip, made at several positions, chiefly on the south-western and north-eastern frontiers of the United States, and of the Magnetic Declination at two positions on the River Sabine; in 1840. By Major James D. Graham, of the United States' Corps of Topographical Engineers,	329
Donations to the Library and Cabinet,	381